REPORT

ON

VITAL STATISTICS OF THE PROVINCE

OF

ASSAM,

1874.

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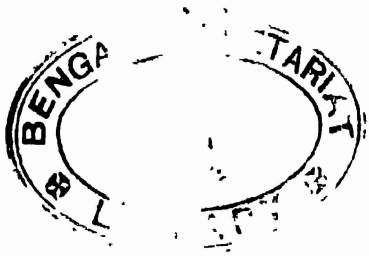

REPORT ON VITAL STATISTICS OF THE PROVINCE OF ASSAM, 1874.

SECTION I.—GENERAL STATISTICS.

THE population of the territory administered by the Chief Commissioner of Assam, comprising Assam Proper on the north, the extensive districts of Sylhet and Cachar, on the south, and the hill country inhabited by the Khásias, Syntengs, Gáros, and Nágas, lying in the middle, is estimated at 4,132,019.

According to the census of 1872, the population is thus distributed:—

Tract.	Districts.	Area in square miles.	Average population per square mile.	Population.
Brahmaputra Valley ...	Assam Proper and Goálpára.	20,683	92·6	1,916,697
Surmá Valley	Sylhet and Cachar ...	6,668	288·6	1,924,566
	Khási and Jaintiá Hills.	6,157	23·0	141,838
	Gáro Hills.....	3,390	23·6	80,000
	Nága ,, ...	4,900	14·0	68,918
	Total	41,798	98·8	4,132,019

In the Brahmaputra valley, population is thinnest in the district of Lakhimpur, being only 39 to the square mile, and thickest in Kámrúp, where it amounts to 155 per square mile; but Sylhet is the most densely-populated district in the Province, the numbers amounting to 319 to the square mile. The estimates for the three Hill Districts which are only political charges are mere approximations.

2. The accompanying table shows the mortality recorded in each division of the Province in 1874, in contrast with that of the two previous years:—

Districts.	Population of registering areas.	1872.		1873.		1874.	
		Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.
Assam Proper and Goálpára...	1,879,125	22,903	12·1	24,233	12·9	35,643	18·9
Sylhet and Cachar	1,924,566	4,707	2·4	5,273	2·7	6,520	3·3
Khási Hills	15,458	33	2·6	423	33·8	428	34·2
Total	3,819,149	27,643	7·0	29,929	7·8	42,591	11·1

NOTE.—This does not include the Gáro and Nága Hills, nor the Eastern Duars of Goálpára, as registration has not been yet enforced in them.

According to this table, which is only useful to exhibit the progress made in registration, the total recorded mortality in 1874 bears to the population a ratio of 11·1 per 1,000, which, though showing a marked improvement on the registration of previous years, is still far below the truth.

The subjoined table exhibits the comparative registration in all the districts of the Province for the years 1873 and 1874, and the extent of increase and decrease recorded in each in 1874; also the average number of deaths in each district for the three preceding years.

The districts are arranged in order of apparent efficiency of registration, which may be supposed to coincide with the highness of the death-rate:—

Tract.	Districts.	Population of registering areas.	1874.		1873.		1874.		Average number of deaths for the previous years.
			Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Increase.	Decrease.	
Assam Proper	Darrang	236,000	8,061	34·1	4,243	17·97	3,818	....	3,204
	Kámrúp	561,681	11,920	21·2	7,510	13·37	4,410	....	6,328
	Nowgong	256,390	5,296	20·6	1,946.	7·58	3,350	....	2,166
	Lakhimpur	120,742	2,090	17·3	1,680	13·91	410	....	986
	Sibságar	296,589	3,464	11·6	3,694	12·45	....	230	4,290
	Total	1,471,411	30,831	20·9	19,073	12·97	11,758	....	16,974
Hills	Khási and Jaintiá Hills, total	15,458	428	27·6	423	27·3	5	....	167
Goálpára	Goálpára, total ..	407,714	4,812	11·8	5,160	12·65	....	348	4,585
Surmá Valley	Sylhet	1,719,539	5,773	3·3	4,473	2·60	1,300	....	3,721
	Cachar.....	205,027	747	3·6	800	3·90	....	53	754
	Total	1,924,566	6,520	3·3	5,273	2·73	1,247	....	4,475
	Grand Total	3,819,149	42,591	11·1	29,929	7·84	12,662	....	26,201

From this, it will be seen that the statistics now obtained in the Khási Hills district are, next to those of Darrang, the most accurate in the Province. Registration in the Khási Hills, however, is not attempted for the entire population; only the deaths occurring amongst the inhabitants of the stations of Shillong and Cherra Poonjee, and those of the selected area in the vicinity of Jowai, a total population of 15,458, are recorded. It is easy to collect the necessary information amongst such a small number of people; the statistics, therefore, are tolerably accurate.

The registration in Assam Proper, including the five districts of Kámrúp, Darrang, Nowgong, Sibságar, and Dibrugarh, appears to stand next in order of correctness, the death-rate amounting to 20·9 per 1,000. The average would stand higher, but for the evidently imperfect registration in the districts of Lakhimpur and Sibságar.

Though the death-rate in Lakhimpur is small, and, judging by the statistics of the selected areas, far below the truth,

there is evidence of a progressive improvement in the registration, the number of deaths registered in 1874 being 410 in excess of those of 1873, and more than double the average of the three preceding years.

In Sibságar, on the other hand, there has been a decided retrogression, the number of deaths registered in 1874 being 230 less than in 1873, and 827 less than the average of the three preceding years. The death-rate in the selected areas in this district is also small, and much below the average of the other selected areas in Assam Proper.

The highest death-rate has been registered in the Darrang district—viz., 34 per 1,000, which is almost double the death-rate recorded in 1873. The improvement in registration in this district, is, however, perhaps more apparent than real, as an excessive number of deaths, equalling 37 per cent. of the total mortality, were caused by the fatal epidemic of cholera which prevailed in 1874.

Registration in the districts of Kámrúp and Nowgong, though still imperfect, shows a marked improvement over that of previous years.

In most of the districts in Assam Proper, then, and in the Khási Hills, the registration may be regarded as satisfactory, inasmuch as it exhibits signs of a progressive improvement; but the same cannot be said of the districts of Goálpára, Sylhet, and Cachar.

In Goálpára, the mortality is recorded at only 11·8 per 1,000, the number of deaths registered being 348 less than in 1873, and barely up to the average of the three preceding years. The mortuary statistics of the selected areas in this district show a death-rate of 53 per 1,000, which, if correct, points to the conclusion that the general mortality in the district has not been one-fourth registered.

In Sylhet and Cachar, the registration appears to be very imperfectly worked, the recorded mortality in these districts being only 3·3 per 1,000 of the population. Colonel Keatinge has put this result on record only to assist in tracing the future improvement in the record of mortuary statistics.

The districts, then, in which registration is worst and in most need of supervision, are those of Cachar, Sylhet, Goálpára, and Sibságar.

SECTION II.—STATISTICS OF SELECTED AREAS.

To arrive at greater accuracy, and to see how much of the mortality still remains unrecorded, it is but necessary to analyze the statistics collected in the selected areas, that is, in circumscribed tracts of the country in which the machinery of registration has been rendered as perfect as circumstances will permit. These areas having been selected with some care, and in localities which may be presumed to represent fairly the physical characters of each district, the statistics obtained from them would, if accurate, and on a sufficiently large scale, furnish a truthful statement of the health of the entire community.

In the following table, the selected areas of registration in the Province of Assam, seventeen in number,—viz., nine rural eight urban, are enumerated, and the population and and death-rate of each area are shown :—

Tract.	Districts.		Total population.	Total deaths.	Ratio per 1,000 of population.
Brahmaputra Valley ...	Goálpára	Urban ..	6,061	245	40·4
		Rural ..	5,145	352	68·4
	Kámrúp	Urban ..	11,492	213	18·5
		Rural ..	23,469	1,312	55·9
	Nowgong	Urban ..	2,883	121	41·9
		Rural ..	5,434	235	43·2
	Darrang	Urban ..	2,282	105	46·0
		Rural ..	6,475	376	58·0
	Sibságar	Urban ..	5,200	96	18·4
		Rural ..	2,989	89	29·7
	Lakhimpur	Urban ..	3,870	274	70·8
		Rural ..	20,566	532	25·8
	Total ...	.....	95,866	3,950	40·9
Surmá Valley ...	Sylhet	Urban ..	16,846	590	35·0
		Rural ..	22,164	767	34·6
	Cachar	Urban ..	3,729	31	8·3
		Rural ..	4,141	105	22·9
	Total ...	.....	46,880	1,493	31·8
Hills	Khási and Jaintiá Hills...	Rural ..	12,504	351	28·0
	Total ...	.....	12,504	351	28·0
	Grand Total ...	.....	1,55,250	5,794	37·3

From this, it will be seen that the mortality in every one of the selected areas of Assam Proper and Goálpára, both urban and rural, with the exception of the urban districts of Kámrúp and Sibságar, in which the registration was no doubt imperfectly carried out, was high, and considerably above that of the selected areas in the Surmá valley or Khási Hills. This high rate of mortality can be explained in great part by the number of deaths caused by the widespread epidemic of cholera which prevailed in Assam during the year. It will be found, on reference to the accompanying table, that in nearly all cases in which the mortality was excessively high,—viz., exceeding 40 per 1,000, a large proportion of it was due to cholera :—

Tract.	Districts.		Ratio of deaths per 1,000 of population	Ratio of deaths per 1,000 due to cholera.	Percentage of deaths from cholera to total deaths.
Brahmaputra Valley ...	Goálpára	Urban ..	40·4	1·8	4·5
		Rural ..	68·4	19·8	28·9
	Kámrúp	Urban ..	18·5	5·	27·2
		Rural ..	55·9	31·1	55·7
	Nowgong	Urban ..	41·9	16·6	39·6
		Rural ..	43·2	16·5	38·2
	Darrang	Urban ..	46·	4·3	9·5
		Rural ..	58·	19·	32·7
	Sibságar	Urban ..	18·4	...	.....
		Rural ..	29·7	...	.....
	Lakhimpur	Urban ..	70·8	9·8	31·3
		Rural ..	25·8	14·7	56·9
	Total ...	.....	40·9	16·2	39·8
Surmá Valley ...	Sylhet	Urban ..	35·	7·	20·1
		Rural ..	34·6	19·	55·
	Cachar	Urban ..	8·3	1·3	16·1
		Rural ..	22·9	2·9	12·3
	Total ...	.....	31·8	12·1	38·1
Hills	Khási and Jaintiá Hills...	Rural ..	28·	·6	2·1
	Total ...	.....	28·	·6	2·1
	Grand Total ...	.....	37·3	13·7	36·7

Deducting the average mortality of 16 per 1,000, due to cholera in the Brahmaputra valley, the remainder, 24·7 per 1,000, may be supposed to represent what, without the destruction caused by this plague, would have been the death-rate

for the year. It may be assumed, however, that a number of those who died from cholera, probably 5 per 1,000, were weakly persons who would have succumbed to other diseases if there had been no cholera. Thus, excluding cholera, we would arrive at a hypothetical death-rate of 30 per 1,000 a proportion that understates rather than overstates the ordinary mortality in the valley of the Brahmaputra. In support of this assertion, we find, on reference to the preceding table, that in the urban circles of Goálpára, Darrang, and Lakhimpur, in which the incidence of cholera was light, furnishing an average mortality of only 5 per 1,000, the death-rate was still over 40 per 1,000.

Registration in some of the selected areas in Assam Proper is undoubtedly defective; thus, in Kámrúp urban area it is only 18·5, in Sibságar 18·4, and in Lakhimpur rural 25·8 per 1,000,—all much below the average of the other areas.

Turning to the selected areas of Sylhet and Cachar and Khási Hills, we find that the death-rate in the Sylhet district has been high, a circumstance that can be accounted for fully by the heavy mortality—viz., close on 14 per 1,000—due to cholera.

The registration in Cachar is undoubtedly defective. Thus, we find in the urban circle a registered mortality of only 8·3 per 1,000, and in the rural circle 22·9 per 1,000, both below the truth.

The recorded mortality in the selected area of the Khási Hills may be accepted as extremely close to the truth; and it furnishes an approximate statement of the health of the entire hills. The population in this case consists of the inhabitants of some five or six isolated villages in the neighbourhood of Jowai, in the Jaintiá Hills. Each village forms a distinctly circumscribed community, the deaths in which are readily ascertained and reported by the doloi, or headman. During the year, there was but little disturbance in these hills from epidemic disease, so that the mortality of 28·0 per 1,000 may be regarded as a fairly accurate statement of the death-rate.

A singular circumstance, and one needing explanation, in the returns of the selected areas of Assam Proper, is, that in almost all instances the mortality in the rural considerably

exceeds that in the urban tracts. The only exception to the rule is Lakhimpur, in which, on the other hand, the mortality of the urban is more than double that of the rural area. In this case, the great excess of mortality was probably due to the fact that a number of imported labourers died in the station of Dibrugarh, having either arrived there in a weakly state, or having been brought for treatment to the dispensary from the neighbouring tea estates.

The total number of deaths registered in the selected areas of Assam, exclusive of the Khási Hills, in which there is no urban area, was 5,443 Of this number, 1,675 were returned from the urban, and 3,768 from the rural tracts, yielding a proportion of 41·6 per 1,000 of the population in the latter, and of only 31·9 per 1,000 in the former.

This is the converse of what obtains generally; for instance, in Bengal, in 1874, the average mortality in the urban exceeded that of the rural circles of the selected areas by about 7 per 1,000, as may be seen from the accompanying table:—

Province.	Urban.	Rural.	Combined.
Assam, exclusive of Hills	31·9	41·6	37·9
Bengal	28·5	21·2	24·7

The probable explanation of this abnormality is that the urban are really more healthy than the rural areas in Assam. As there are no large towns, properly so-called, in the Province, the town and country areas do not differ very materially in point of population. The townships of Gauháti, Tezpur, Nowgong, and Dibrugarh are rather aggregations of separate villages than densely-populated towns. In Gauháti, which is one of the largest of the towns, the incidence of population is only twelve to the acre. The rural areas, on the other hand, comprise a number of scattered villages, in each of which the incidence of population to the actual space occupied is probably as great as in the towns. Then, there is no attempt at conservancy in the rural villages, and most of them are surrounded by uncultivated swamps, dense jungle, or rice-lands.

On the other hand, in the urban areas, which in all instances include the sudder or head-quarters' station, sanitary measures are carried out to a certain extent, surface-drainage is attended to, the growth of the jungle is kept down, and filth and refuse are removed from the vicinity of dwellings. In Gauháti, under the influence of the municipality, sanitation has made some real progress.

SECTION III.—COLLECTION OF VITAL STATISTICS.

The method of procedure observed in the collection of vital statistics is as follows:—

A.—General Statistics.

Kámrúp. Darrang. Nowgong. Sibságar. Lakhimpur.

These statistics are collected in Assam Proper* by the mouzahdar of each mouzah, who enters in his daily register (Form A.) the casualties as they occur, from information received from the mandals, heads of villages, and relatives of the deceased. The mouzahdar submits to the officer in charge of the thannah in whose jurisdiction the mouzah is situated a weekly nominal return in the prescribed form, showing the entries in his daily register. The police officer then compiles one nominal return for the entire thannah circle, and submits it to the District Superintendent of Police, who forwards all the returns from the different thannahs to the Civil Surgeon or Deputy-Commissioner of the district, as the case may be.

Sylhet and Goálpára.

In the districts of Sylhet and Goálpára, the statistics of births and deaths are collected in each thannah from information furnished by the village chaukidars. Weekly nominal returns in the prescribed form are sent by the thannah officer to the District Superintendent of Police, who sends them on to the Civil Surgeon or Deputy-Commissioner.

Cachar.

In the district of Cachar, the general statistics of births and deaths are collected at the tahsils at the sudder stations,

Háilákándi and Kátigára. The tahsildars keep daily registers, from information furnished by the village chaukidars, and subm t a monthly nominal return to the Deputy-Commissioner.

Hill Districts.

In the Nága, Khási, and Jaintiá Hills, the general death statistics are collected by the police, and compiled in the office of the Civil Surgeon in the latter case, and in the office of the Political Agent in the former.

No vital statistics are collected in the Gáro Hills. Those recorded in the Nága Hills are partial, and useful only as a measure of education for the police and the people.

B.—Selected Areas.

In each of the selected areas, a special agency is employed for collecting vital statistics. As the system in force varies in each district, the different areas and methods of procedure in each are here enumerated.

Goálpára.

Urban.—Rs. 4 monthly has been sanctioned for the collection of vital statistics in this area—viz., one rupee each to two constables of the sudder station, and two rupees to the dâk mohurrir who supervises their work and submits the returns.

Rural, Dalgoma.—Two constables of Kamarpatr outpost get one rupee a month each. They remain in the villages, collect information, and send monthly nominal returns to the Civil Surgeon.

Kámrúp.

Urban.—The Civil Surgeon of Gauháti keeps a daily register. A mohurri on Rs. 15 is paid by the municipality to assist him. The inhabitants of the town have been warned to report all casualties to the Civil Surgeon, and a fine of Rs. 5 may be inflicted for non-compliance.

Rural, Dhurmapore.—Registration is conducted in this area by four mohurrirs on Rs. 6-8 a month each. The area has been divided into four sections. Information is obtained through the

mandals, which the monurrirs test by constant visits to the villages. They submit weekly nominal returns.

Tezpur.

Urban.—Statistics are collected by the town mouzahdar; a gaonbura on Rs. 1-8 a month assists him. He submits weekly returns.

Rural, Bihugurie.—A staff of eight gaonburas on Re. 1-8 a month each, collect the statistics. They send weekly returns to the thannah officer, who submits them to the Civil Surgeon.

Nowgong.

Urban and Rural.—Statistics collected by the mouzahdars, who submit weekly returns to the thannah officer. Rs. 50 per annum sanctioned, to be paid as rewards if the work is well done.

Sibságar.

Urban and Rural.—The procedure is the same as in Nowgong.

Lakhimpur.

Urban, Dibrugarh.—Statistics collected by the town mouzahdar. The commanding officer supplies the statistics of the cantonment.

Rural, Dhakwakana.—Statistics supplied from the mouzahdars from information collected by their mandals. Rs. 50 a year sanctioned as reward, if the work is well done.

Cachar.

Urban, Silchar.—Statistics, collected by town constables, are reported at the sudder thannah, where the usual registers are kept.

Rural, Barenga, &c.—Statistics collected by a special mohurrir on Rs. 12 a month, who collects information from village chaukidars, and tests it by personal inquiries.

Sylhet.

Urban.—Statistics collected by the town police.

Rural, Bamacherra.—The deaths in this area are registered in the cutcherry of the local zemindar. The statistics are collected by his amlah, from information supplied by the village mandals and paiks.

Khási Hills.

Rural, Jowai, &c.—Information of deaths is given at the Jowai thannah by the headmen of the different villages. The thannah officer submits monthly copies of the registers to the Deputy-Commissioner.

In the subjoined table, the area, population, and boundaries of each of the selected areas are shown, and the annual expenditure for the collection of mortuary statistics.

Goálpára.

Name of Registering Area.	Area in square miles.	Population.	Boundaries.	Annual expenditure.
Urban, Goálpára	2·25	6,061	*N.* & *E.*—Brahmaputra. *S.*—School road. *W.*—Karbalo.	Rs. 48
Rural, Dalgoma	.....	5,145	*N.*—Brahmaputra. *W.*—Dolapara, Borojooly, and Bhujmala. *S.*—Krishnoi, Majkuri, Nondeshar, Jogeshpara, and Karipara. *E.*—Bhoholy, Bhersheri, and Bajuan.	72
		Kámrúp.		
Urban, Gauháti	2	11,492	Limits of the town of Gauháti.	
Rural, Dhurmopore	30	23,469	*S.*—Mouzahs Borkhettry and Sorookhettry. *E.*—By mouzahs Pakoah, Kharija, Khattia, and Batargilla. *W.*—By mouzah Soroo-khettry and Pakoah. *N.*—By mouzah Noloon-dehoe and Namborhoy.	312

Darrang.

Name of Registering Area.	Area in square miles.	Population.	Boundaries.	Annual expenditure.
Urban, Tezpur	1	2,282	*N.*—Government road at back of police lines. *S.*—Brahmaputra. *E.*—Goriagaon Mertholah. *W.*—Sookdul Bheel.	Rs.
Rural, Mouzahs Bansbari, Pilakhawa, and Bihuguric.	53	6,475	*N.*—Bhutan. *S.*—Brahmaputra. *E.*—The Jeya and the Mora Deputa rivers. *W.*—Gabroo river.	170
		Nowgong		
Urban, Nowgong.....	1·23	2,883	*N.*—Tchapahar and Kasomari. *S.*—Noabibijan and Mori Kulung. *W.*—Lenchra and Kachomari. *E.*—Mori Kullung and Demorugurie.	
Rural, Morikulung and Demorugurie.	6	3,433	*N.*—Kulung river. *S.*—Bholaigong and Borpathoria. *E.*—Bholaigong. *W.*—Town mouzah.	50
Nonsebejia	4·85	2,001	*N.*—Kulung river. *S.*—Mori Kulung, Demorugurie, Borpathoria, and Paklumoria. *E.*—Town mouzah, and Morikulung Demoruguru mouzahs. *W.*—Ghalnee Belegia.	
		Sibságar.		
Urban, Sibságar town mouzah.	7	5,200	*N.*—Dorika river. *S.*—Dilao river. *E.*—Borpatha Ali, and Dikhowbund. *W.*—Tan Ali.	
Rural Charigaon and Nalkola.	4	2,989	*N.*—Southern boundary of Bahoria and Kachogoral mouzahs. *S.*—Leoni Ali (now trunk road). *E.*—Hatiguri. *W.*—Old Disoi river	50

Lakhimpur.

Name of Registering Area.	Area in square miles.	Population.	Boundaries.	Annual expenditure.
Urban, Dibrugarh	2·80	2,774	*N.*—Dibru river. *E.*—Cantonments. *W.*—Topajan. *S.*—Trunk road.	Rs.
Cantonments.....	·660	1,096	*N.*—Dibru river. *E.*—Mr. Hannay's tea-garden. *W.*—Station road. *S.*—Station back road.	
Rural, Jaipur thannah ...	605	8,357	*N.*—Dihing river. *E.*—Makoom. *W.*—Rani Dihingia mouzah. *S.*—Nága Hills.	50
Dhakwakhana mouzah ...	211	12,209	*N.*—Korha, *E.*—Hari Mukh. *W.*—Korha. *S.*—Kherkotia Sati.	
Ditto thannah ...			*N.*—Rajgurh. *E.*—Kaporajan. *W.*—Sobunsiri river. *S.*—Kherkotia Sati.	
		Cachar.		
Urban, Silchar	3·75	3,729	*N.*—Barak river. *E.*—Line from Lakhipur road to Barak. *W.*—Kata Khall. *S.*—Line from coolie-depôt to Lakhipur road.	
Rural, Berenga	3·90	2,449	*N.* & *E.*—Barak river. *W.*—Madarbund and Konockpore villages. *S.*—Barak river.	162
Konockpore	1·50	800	*N.*—Madarbund. *E.*—Ranghir, Khari Khall, and river Barak. *W.*—Ambicapore village, *S.*—Ootter Krishnapore.	
Madarbund	·50	892	*N.*—River Barak. *E.*—Berenga. *W.*—Silchar. *S.*—Krishnapore and Khanjri Khal.	
			Total ...	866

Sylhet.

Name of Registering Area.	Area in square miles.	Population.	Boundaries.	Annual expenditure.
Urban, Sylhet	13·18	16,846	*N.*—Gurhduar. *E.*—Tillagurh. *W.*—Chowdewari and Shagurdigi. *S.*—Surmá river.	
Rural, Bamcherra	4·4	22,164	Boundaries not given.	
Khási and Jaintiá Hills.				
Rural, Jowai, Nongbah, Nurtiang, Mynsau, Umwee, Ralliang, Shampoong.	Not known.	12,504	Boundaries not defined.	
Nága Hills.				
Urban, Samaguting	1	746	Boundary not fixed.	
Rural, Demapore	1	187	Ditto ditto.	

SECTION IV.—HISTORY OF PARTICULAR DISEASES.

I.—Cholera.

The subjoined table shows the number of deaths, and relative mortality, caused by different diseases in this Province in 1874:—

Diseases.	Number of deaths.	Percentage of total deaths.
Cholera	16,478	38·6
Fevers	15,910	37·5
Bowel-complaints	5,276	12·3
Small-pox	1,370	3·2
Snake-bites and wild beasts.....	401	·9
Accidents	290	·6
Wounding	46	·1
Suicide	32	·07
All other causes.....	2,788	6·5
Total	42,591	99·7

From this, it appears that cholera caused many more deaths than any other single disease—16,478 fatal cases, accounting for 38 per cent. of the total mortality, were registered. This number is largely in excess of the average of the two previous years.

The accompanying table shows the number of deaths in each district, and ratio per 1,000 of population, for the three past years:—

Divisions.	Districts.	Population of registering area.	1872.		1873.		1874.	
			Deaths from cholera.	Ratio per 1,000	Deaths from cholera.	Ratio per 1,000.	Deaths from cholera.	Ratio per 1,000.
Brahmaputra Valley.	Goálpára	407,714	862	2·11	668	1·36	272	·6
	Kámrúp	561,681	2,026	3·60	2,201	3·91	5,905	10·5
	Darrang	236,009	508	2·15	590	2·49	2,997	12·6
	Nowgong	256,390	352	1·37	168	·65	3,106	12·1
	Sibságar	296,589	3,074	10·36	527	1·77	337	1·1
	Lakhimpur	120,742	94	·77	377	3·12	855	7·
	Total	1,879,125	6,916	3·4	4,531	2·4	13,472	7·1
Hills	Khási and Jaintiá Hills	15,458	3	·1	33	2·1	24	1·5
Surma Valley	Sylhet	1,719,539	524	·30	933	·54	2,763	1·6
	Cachar	205,027	782	3·81	194	·94	219	1·
	Total	1,924,566	1,306	·6	1,127	·5	2,982	1·5
	Grand Total...	3,819,149	8,225	2·1	5,691	1·4	16,478	4·3

From this, it will be seen that the number of deaths reported to be caused by cholera in 1874 was 9,520 in excess of the average of the two previous years.

The accompanying table shows the prevalence of cholera in each district according to months:—

Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Goálpára	....	1	6	6	21	40	29	....	....	....	26	143	272
Kámrúp	32	32	44	128	888	1,618	1,282	711	295	126	339	460	5,905
Nowgong	....	....	88	102	446	656	542	217	248	113	485	214	3,106
Darrang	29	70	33	46	520	1,006	562	191	62	169	133	186	2,997
Sibságar	15	40	43	40	19	40	23	7	3	14	30	63	337
Lakhimpur	11	23	11	43	248	120	43	125	114	22	93	2	855
Cachar	24	15	4	8	12	20	5	....	9	14	57	51	219
Sylhet	71	56	70	39	100	113	69	38	198	526	861	623	2,763
Khási Hills	....	....	....	....	8	....	7	2	4	3	....	....	24
Total	182	237	299	412	2,262	3,613	2,512	1,291	928	976	2,024	1,742	16,478

Darrang, Nowgong, and Kámrúp were the districts most severely affected; and the months towards the beginning of the rains, viz., May, June, and July, were the most fatal.

In the months of August, September, and October, there was a comparative lull in the progress of the disease, but the number of fatal cases increased again in November and December.

District of Goálpára.

Population ..... 444,761.

Cholera is said to be endemic in this district. The mortality ascribed to the disease for the past three years is as follows :—

Years.	Number of deaths.	Ratio per 1,000 of population
1872	862	2·1
1873	668	1·3
1874	272	·6

From this, it will be seen that the outbreak of the disease in 1874 was mild, compared with those of former years. The greatest number of deaths (143) occurred in December; and at this time the Civil Surgeon was of opinion that the disease had been imported into the district from Eastern Bengal. A few scattered cases had occurred throughout the district in the months of May, June, and July. For the ensuing three months, no cases were registered; but in November the disease appeared about the same time in two widely-distant parts of the district, but both lying on the banks of the Brahmaputra—viz., at Parli and Andharmooa, in pergunnah Chapur, in the north-west quarter of the district, on the right bank; and at Mornoi and Dalgoma, villages in the eastern extremity of the district, and on the left bank of the river.

Concerning the origin of the outbreak, the civil medical officer remarks in his annual report for 1874:—

"Mornoi is a timber-depôt, and a large number of rafts are moored to the banks of a small stream named the Doodnoi, which flows to the east of the village. On these rafts, the woodmen live in straw huts,

and a good deal of impurity reaches the stream from them. A boat, in which a Brahman was proceeding to Gauháti, anchored for the night in the stream close to the rafts. No doubt the boatmen and woodmen held communication with one another. During the night, one of the boat's crew was attacked by cholera and died. The disease then spread to the woodmen, and, from them, to the villagers of Mornoi, from whence it travelled to Dalgoma and Bhotee, where it found localities prepared for its reception. Rank vegetation, rotting leaves, filth, and impure water, which latter was obtained from the bheels, were all present to give it welcome. As the disease progressed, the dead were left unburied near the villages, thus inviting wild beasts—even tigers it is said—so that the people were afraid to leave their huts at night to obtain medicines; and many perished in this way for want of timely aid.

"There can be little doubt that the disease in this year originated amongst the boatmen coming up from Eastern Bengal; as, similarly to the Dalgoma outbreak, the first death of several that occurred at the sudder station was in the person of a boatman belonging to a boat waiting for cargo at Namoona Bazar."

District of Kámrúp.

Population ... ... 561,681.

A total of 11,920 deaths, yielding a mortality of 21·2 per 1,000 of the population, was registered in this district during the year; of this number, 5,905, or almost an exact half, are ascribed to cholera, a number considerably in excess of the average of the two previous years:—

Years.	Number of deaths from cholera.	Ratio per 1,000.
1872	2,201	3·6
1873	2,026	3·9
1874	5,905	10·5

In the selected areas, the recorded mortality from this disease is 23 per 1,000.

The comparative death-rate from different diseases in the Kámrúp district in 1873 and 1874 is given in the accompanying table:—

Diseases.	Death-rate per 1,000 in 1873.	Death-rate per 1,000 in 1874.
Fevers (chiefly intermittent)	6·6	6·4
Cholera	3·6	10·5
Bowel-complaints	1·33	2·2
Small-pox	·2	·9

From this, it may be seen that, while the mortality from fevers was almost the same as that of the previous year, cholera and bowel-complaints generally prevailed to a much greater extent. Still, in paragraph 3 of his sanitary report for the year under consideration, the Civil Surgeon writes that "epidemic diseases have neither been widespread nor unusually fatal."

At paragraph 6, he states—"I place no reliance on the mortuary returns, which are compiled roughly by the rural authorities." Still, allowing that the returns are to a certain extent untrustworthy, there can be little doubt, judging from the figures given above, that a severe epidemic of cholera prevailed in Kámrúp during the year, as it did in the adjacent districts of Darrang and Nowgong. The returns were equally untrustworthy, if not more so, in 1872 and 1873; yet, while showing an equal percentage of fevers, they do not show anything like the same amount of cholera. Again, the returns from the selected areas, which are undoubtedly approximately correct, show a mortality from cholera of 23 per 1,000. The Civil Surgeon, therefore, argues rather against facts, when he says—"The general health of the district seems to be improving. There have been less cholera and small-pox in 1874 than in 1873." The only reliable information that we possess on the subject are the returns, and they are decidedly adverse to this assertion. A good deal of allowance must of course be made for the improved registration, which yields figures much higher than those of previous years; but, taking everything into account, there can be no doubt but that cholera prevailed very extensively in this district throughout the year.

Darrang District.

Population 236,009

Cholera prevailed in this district throughout the entire year, but with greatest severity in the months of May, June, and July. As in previous years, the populous sub-division of Mangaldai suffered most:—

Years.	Number of deaths from cholera.	Ratio per 1,000.
1872	508	2·1
1873	590	2·4
1874	2,997	12·6

A portion of the recorded increase of mortality is no doubt due to improvement in the returns; still, there can be no doubt that the year was a singularly unhealthy one. The civil medical officer in his annual report observes—

"A good many deaths from cholera have been reported. The death-rate from cholera for the whole district is shown as 12·6 per 1,000. The largest number of deaths occurred in May, June, and July; and, as usual, the chief seat of the disease was the sub-division of Mangaldai, in the south-west part of the district.

"I can give no information as to the exact dates and places of the outbreaks. It is alleged that in one instance it broke out in a village immediately after the arrival of a batch of Bengalee labourers, amongst whom there had been cholera during their journey."

Commenting on the above, the Deputy-Commissioner writes—

"Disregarding figured statements (the mortuary returns), and, speaking from personal observation and from conversation with natives, I am of opinion that 1874 has been one of the most unhealthy years within the memory of the present generation. The reported deaths from cholera, especially in the Mangaldai sub-division, give but a very faint idea of the actual mortality which must have occurred between the months of April and July, and of course quite fail to indicate the number of cases which did not prove fatal. I may mention that on two occasions I had to order the burning of the dwelling-houses containing the dead bodies of an entire family, as, owing to caste prejudices, and, doubtlessly in part to fear, no persons were forthcoming to bury the dead."

District of Nowgong.

Population 256,390

Year.	Deaths from cholera.	Ratio per 1,000 of population.
1872	352	1·3
1873	168	·6
1874	3,106	12·1

Cholera prevailed in this district apparently with unusual severity during the entire year.

The sudder station was free from the disease until May, when possibly it was imported by the detachment of the 42nd

Native Infantry which relieved the 43rd in that month. Concerning the outbreak, the civil medical officer writes:—

"The cause of the outbreak may fairly be attributed to importation of the disease by the arrival of the relieving detachment, which had cholera on board the steamer in which it came from Dibrugarh to Koliabar. The detachment arrived in Nowgong on the 9th May, up to which time no cases of cholera had occurred in the detachment lines, and none that I heard of in the station of Nowgong, though about this time cases were occurring in the interior of the district far off. But on the 10th, the day after the arrival of the infected detachment, cholera appeared in the lines of the detachment, and radiated from that spot to all parts of the station."

Sibságar District.

Population 296,589

As in other districts of Assam, cholera is said to be endemic in Sibságar, and the mortuary returns for 1874 show that a few cases occurred in each month of the year. The disease, however, was comparatively light, compared with former years, and cannot be said to have prevailed with epidemic violence, as it did in the districts of Kámrúp, Darrang, and Nowgong.

The mortality ascribed to the disease for the past three years is as follows:—

Years.	Number of deaths.	Ratio per 1,000 of population.
1872	3,074	10·3
1873	527	1·7
1874	337	1·1

Concerning this disease, the Civil Surgeon remarks in his annual report for 1874:—

"Cholera is endemic in the district, and was present in sporadic form in every month throughout the year. Some sharp outbreaks were reported from the sub-divisions of Jorhát and Golághát during the months of February, April, November, and December, but nowhere did they last long, or assume real epidemic form. Judging from the descriptions given of this disease by the Hospital-Assistants who were from time to time sent out to afford medical aid to the villagers in the

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interior, I have every reason to believe that most of the deaths returned under the head of 'cholera' in the mortuary returns were nothing but cases of bilious fevers or diarrhœa, brought on by the use of unwholesome food or exposure to cold and damp."

Lakhimpur District.

Population 121,267

Cholera prevailed in this district throughout the entire year. 855 deaths from this disease are registered in the mortuary returns, yielding a mortality of 7· per 1,000, which is considerably above the average of the two previous years:—

Years.	Number of deaths from cholera.	Ratio per 1,000.
1872	94	·7
1873	377	3·1
1874	855	7·0

The disease prevailed chiefly in the months of May, June, August, and September. Much of the apparent increase of mortality is doubtless due to improvement in the registration; still, the year appears to have been really a most unhealthy one.

With regard to it, the Civil Surgeon writes in his annual report:—

"The year was a most unhealthy one. Although there was no epidemic of any magnitude or duration, the mortality of every class of the population was considerably above the average of the preceding decade. The increased sickness and mortality were due, in my opinion (as far as the general population is concerned), to the increased rainfall and its irregular distribution. I find, on examination of the monthly meteorological returns, that, after exceedingly heavy and continuous rain during the latter part of April and commencement of May, there was an interval of fourteen days from 24th May to 10th June, in which only 3-10ths of an inch fell. Another similar unseasonable period occurred from 18th to 28th of July, in which only 7-10ths of an inch fell. The effect of this was to create two additional drying-up periods, in addition to the ordinary one in September and October, and the consequent increased production of miasmata."

Sylhet District.

Population 1,719,539

Cholera prevailed in this district throughout the year. The number of deaths registered was more than three times the average of the two preceding years:—

Years.	Number of deaths.	Ratio per 1,000 of population.
1872	524	·3
1873	933	·5
1874	2,763	1·6

On this subject, the Civil Surgeon remarks:—

"Both in the general district and selected area returns, cholera was the cause assigned for half the total number of deaths. Without being bound by the question of the accuracy of the figures, one can, from these returns, gather a fairly just notion of the prevalence of such an obvious disease as cholera; for it is not likely that the most careless enumerator would assign a number of deaths to a disease not known in his station at the time. And if the figures be even approximately true, cholera has been exceptionally severe and exceptionally diffused during the past year. Cases of it are recorded in every month, in numbers varying from 38 in August to 623 in December; the mortality in the last quarter being much more than half that of the whole year. It was never observed at fewer than seven out of the seventeen registering stations any month. It occurred at all in the month of November, and at sixteen in the month of March. No history of importation could be made out; cases occurred nearly at the same time in mohullahs far removed from each other."

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Number of deaths from cholera.	71	56	70	39	100	113	69	38	198	525	861	623	2,763

Cachar.

Population 205,027

Cholera prevailed to only a slight extent in this district during the year. The total number of deaths ascribed to it is 219, giving a mortality of one per 1,000. There were a

few cases in each month, excepting August, in which there were none. The largest number of deaths,—viz., fifty-seven, occurred in November :—

Years.	Number of deaths.	Ratio per 1,000.
1872	782	3·8
1873	194	·9
1874	219	1·0

Touching the subject, the following remarks are extracted from the Civil Surgeon's sanitary report for the year :—

"No epidemic of small-pox or cholera occurred during the year under review. Sporadic cases of the latter did happen; but they were few, and were principally confined to the coolies, who contracted the disease on their way up from Calcutta. In former times, occasionally villages were decimated by these diseases; now we but seldom hear of them."

Khási Hills.

Population ...	...	...	141,838
Population of registering area		...	15,458

Only twenty-four deaths from cholera appear in the mortuary returns for the year, yielding a mortality of 1·5 on the population of the registering area :—

Years.	Number of deaths.	Ratio per 1,000.
1872	3	·1
1873	33	2·1
1874	24	1 5

The disease is attributed to importation from the plains. Many more deaths probably occurred in the villages on the northern and southern slopes of the hills; but as registration is only enforced in Cherra, Jowai, and Shillong, no account of them appears in the returns.

The year, however, was on the whole remarkably free from cholera, and but few reports of its visitations, or requisitions for medicines, as is usual in other years, were received by the Civil Surgeon.

Gáro Hills.

Population 80,000

Mortuary registration is not in force in these hills, but they appear to have been free from cholera during the year. Under the heading "Cholera," in his sanitary report, the Civil Surgeon observes—

"Not a single case of cholera has occured in Tura during the year 1874. One constable was sent on duty to Mymensingh, and died of cholera during his return journey."

Nága Hills.

Population... 68,918

No returns have been received from these hills. They appear to have been free from cholera throughout the year. In his annual sanitary report, the Civil Surgeon writes—

"The health of the district has, on the whole, been comparatively better than in the last year. Cholera did not make its appearance in the district."

II.—Small-pox.

1,370 fatal cases of small-pox were registered in the Province in 1874, against 569 in 1873 and 552 in 1872. The death-rate from this disease amounted to 0·3 per 1,000 of the population, which is nearly three times greater than the average of the two preceding years. It would be difficult to assert how much of this increase is due to greater prevalence of the disease; how much to improved registration. Without question, a large portion of the apparent increase is due to the latter cause.

Inoculation is largely practised in the districts on the plains, but is hardly known on the hills. To this practice, which keeps the seeds of the disease ever alive and present, most of the outbreaks in the plains probably owe their origin.

Vaccination is reported to be making favourable progress in the greater number of the districts. Most success has attended its introduction in the hill countries; but it is also making rapid way in some of the districts in the plains, notably in those of

Kámrúp, Sibságar, and Cachar. The number vaccinated in the Khási Hills in 1874 was more than five times in excess of the average of previous years.

The practice of training inoculators as vaccinators has been attended with most favourable results in the Kámrúp district. The Civil Surgeon reports that seventy-nine ex-inoculators have been induced to adopt vaccination during the year.

If a similar practice could be introduced into the other districts, rapid strides would be made in a short time towards the establishment of a perfect system of vaccination. If it has been possible to get the inoculators to adopt vaccination in the Kámrúp district, there can be no reason why the same could not be done in the other districts. A little persuasion would probably suffice to induce the inoculators to practise their art with vaccine instead of small-pox crusts,—and this is all that is required.

The accompanying table shows the number of deaths from small-pox in each district for three years, and the ratios per 1,000 of population :—

Divisions.	Districts.	Population.	1872.		1873.		1874.	
			Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.
Brahmaputra Valley.	Goálpára	444,761	77	·18	84	·20	95	·2
	Kámrúp	561,681	137	·24	142	·25	529	·9
	Nowgong	256,390	22	·08	70	·27	196	·7
	Darrang	236,009	177	·74	94	·39	185	·7
	Sibságar	296,589	110	·37	55	·18	88	·2
	Lakhimpur	121,267	8	·06	23	·18	117	·9
	Total	1,916,697	531	·28	468	·24	1,210	·6
Hills ...	Khási and Jaintiá Hills.	141,838	...	...	...	...	...	...
Surmá Valley.	Sylhet	1,719,539	12	·007	49	·02	147	·08
	Cachar	205,027	9	·04	52	·2	13	·06
	Total ...	1,924,566	21	·01	101	·05	160	·08
	Grand Total ...	3,983,101	552	·1	569	·1	1,370	·3

The disease prevailed chiefly in the months of April, May, June, and July, and the districts of Kámrúp, Lakhimpur, Darrang, and Nowgong were most severely visited. The accompanying table shows the number of cases in each district according to months :—

Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Goálpára..	8	1	3	12	44	18	15	2	...	1	...	1	95
Kámrúp ...	33	49	66	93	83	111	63	19	6	1	3	2	529
Nowgong...	8	3	15	17	96	26	20	9	...	...	1	1	196
Darrang ...	8	2	41	15	38	37	23	6	1	2	...	12	185
Sibságar ...	2	3	14	4	10	19	28	...	4	4	...	...	88
Lakhimpur	7	8	10	36	21	16	11	3	4	...	1	...	117
Cachar.....	2	2	1	2	...	...	1	...	...	...	4	1	13
Sylhet.....	9	21	22	20	18	8	11	4	...	4	9	21	147
Khási Hills	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	77	89	172	199	310	225	172	43	15	12	18	38	1,370

The subjoined particulars on the subject of the prevalence of small-pox are extracted chiefly from the Civil Surgeons' reports.

Goálpára.

Small-pox.—Only ninety-five fatal cases of this disease were registered during the year, a number slightly in excess of the average of the two previous years:—

Years.	Deaths.	Ratio.
1872	77	·1
1873	84	·2
1874	95	·2

The Civil Surgeon remarks in his annual report:—

"Small-pox occurred only to a limited extent, which would appear to indicate that the practice of inoculation, so general in the district, has little to do with originating epidemic outbreaks of disease. Possibly, it is only when a large number of feebly-protected persons have accumulated, as happens even with inoculation, that it breaks out with epidemic force."

Kámrúp.

529 cases of small-pox were registered in this district in 1874, compared with 137 in 1872, and 142 in 1873:—

Years.	Deaths.	Ratio.
1872	137	.24
1873	142	.25
1874	529	·9

Much of the apparent increase is doubtless due to improved registration. In his annual report, the Civil Surgeon observes on this subject:—

"Small-pox prevails only to a slight extent in the station of Gauháti. During the early months no cases have been known to exist. In the district, it probably exists more or less all through the year, but no records are available. It was formerly much spread by the inoculators; certain of these, last year, being proved to have been the cause of an outbreak of small-pox, were punished."

Darrang.

185 deaths from small-pox were recorded in this district, yielding a mortality of 0·7 on the general population.

Years.	Deaths.	Ratio.
1872	177	·74
1873	94	·39
1874	185	·7

The spread of the disease in different parts of the district has been attributed to the practice of inoculation. The Civil Surgeon writes on this subject in his report:—

"The mortuary returns for the whole district show a death-rate of 0·7 per 1,000 from small-pox; but in the special rural area of Bihugurie the rate was 2·5 per 1,000. The majority of the deaths occurred during the five months from March to July. In March, the chief seat of the disease was the north-west part of the district; in April, the eastern part; in June and July, the western part; in December, the extreme eastern part. The disease did not, therefore, proceed in a distinct course. The outbreaks in the different parts of the district seem to have been independent of each other, and perhaps they were due to inoculation."

Nowgong.

The death-rate from small-pox in this district was high, compared with the two preceding years, but not above the general average of the districts of Assam Proper.

Years.	Deaths.	Ratio.
1872	22	·08
1873	70	·27
1874	196	·7

No information concerning the origin or spread of the disease is given by the Civil Surgeon in his report. As in Darrang and other districts, it probably owed its origin in many instances to inoculation, which is practised to a large extent in the district. The people are said to have more faith in it than in vaccination, and, from the smallness of the number vaccinated during the year, viz., 408, such would appear to be the case.

Sibságar.

Small-pox appears to have prevailed to but a slight extent in this district during the year. Only eighty-eight deaths are recorded, yielding a mortality of 0·2 per 1,000, which is close to the average of the two preceding years:—

Years.	Deaths.	Ratio.
1872	110	·37
1873	55	·18
1874	88	·2

The annual sanitary report of the civil medical officer gives little information on this subject. Inoculation is said to be largely practised in the district amongst the poorer classes, thus keeping up the supply of *materies morbi.* Amongst the more enlightened portions of the community, vaccination is said to be growing in favour. Four extra vaccinators were employed during the year, and vaccinated 2,543 children, which is a great stride in advance of the practice in former years.

Lakhimpur.

The recorded mortality from small-pox in this district is considerably above the average of the two previous years. 117 deaths were registered, giving a mortality of 0·9 per 1,000 of the population:—

Years.	Deaths.	Ratio.
1872	8	·06
1873	23	·18
1874	117	·9

No particulars on the subject of this disease are given in the Civil Surgeon's annual report. Probably, a good deal of the apparent increase is due to more accurate registration.

Sylhet.

Small-pox prevailed only to a limited extent in this district. 147 deaths were registered, yielding a death-rate of 0·8 per 1,000 of the population. The largest number of deaths occurred in the months of February, March, and April.

Years	Deaths.	Ratio.
1872	12	·007
1873	49	·02
1874	147	·08

Cachar.

Only thirteen deaths from small-pox were registered in this district, compared with fifty three in 1873 and nine in 1872. As registration is very defective in the district, these figures cannot be relied on.

Khási and Nága Hills.

No deaths from small-pox have been registered in the Khási or Nága Hills during the year.

Gáro Hills.

Several cases occurred in three villages in the Gáro Hills; but as no mortuary returns are received from this district, the exact numbers cannot be given. The Civil Surgeon gives an account of the outbreak in his sanitary report for the year, which is quoted:—

"Three of the Gáro villages recently vaccinated were attacked with small-pox. I paid a visit to them, with the object of ascertaining the source of contagion, but failed to trace the disease to any particular spot; and I was at last reluctantly obliged to attribute the outbreak to the lymph employed in vaccination. Nearly every individual in these three villages was attacked, and, as far as could be ascertained, some twenty-four or twenty-five cases in all proved fatal. Every means was taken to prevent the spread of the disease beyond the area primarily attacked. The roads to the villages were closed, and communication with the surrounding villages, the plains, and with Tura, stopped. After a while, when those affected could be removed, the villagers were induced to desert their villages, and to take up their residence in their khets, until all chance of contagion was passed. By this means, with one solitary exception, the disease was strictly confined to the three villages in which it originally appeared."

III.—Fevers.

Next to cholera, fevers have been the most prolific source of mortality. 15,910, or 37 per cent. of the total deaths, are registered under this head.

A large number of widely different diseases are roughly grouped in this class. Every disease accompanied by abnormal heat is called by the natives "fever," so that this heading includes all inflammatory affections, as well as the fevers properly so-called—viz., those of the intermittent and remittent types, and

typhoid. That typhoid is a common disease in Assam, there can be little doubt. Several fatal cases, verified by *post mortem* examinations, occurred amongst the men of the 43rd Regiment, A. L. I., in Gauháti in 1873, and a few in Shillong in 1874. The conditions being much the same, there is no reason to suppose that the disease prevails in one year and not in another, or that one body of people should be subject to its attacks, and not the general community. The conditions necessary for its existence may be found in most of the towns and villages of Assam—viz., defective drainage, an almost total absence of conservancy arrangements, and impure drinking-water.

The great majority of fevers, however, are of a purely malarious nature. On this point, the testimony of the medical officers is unanimous.

The exuberant vegetation, large amount of rice cultivation, and extensive tracts of swampy and uncultivated lands, render the climate essentially malarious.

In the subjoined table, the number of deaths from fevers, and the ratio per 1,000, in the different districts for the past three years are shown:—

Divisions.	Districts.	Population of registering area.	1872.		1873.		1874.	
			Deaths.	Ratio. per 1,000.	Deaths.	Ratio. per 1,000.	Deaths.	Ratio per 1,000.
Assam Proper....	Goálpára	407,714	2,473	5·56	3,415	8·37	3,254	7·9
	Kámrúp	561,681	2,875	5·11	3,732	6·64	3,609	6·4
	Darrang	236,009	2,100	8·89	2,493	10·56	3,050	12·5
	Nowgong	256,390	830	3·23	1,213	4·75	1,226	4·7
	Sibságar	296,589	2,521	8·50	2,165	7·29	1,953	6·5
	Lakhimpur.....	120,742	357	2·94	858	7·07	692	5·7
	Total	1,879,125	11,156	5·9	13,876	7·4	13,784	7·3
Hills	Khási and Jaintiá Hills.	15,458	10	0·6	241	15·5	296	19·1
Surmá Valley	Sylhet	1,719,539	1,772	1·03	1,989	1·15	1,515	·8
	Cachar.....	205,027	244	1·19	410	1·99	315	1·4
	Total	1,924,566	2,016	1·05	2,399	1·23	1,830	·9
	Grand Total	3,819,149	13,182	3·4	17,516	4·5	15,910	4·1

The number of deaths registered was less than in 1873, the death-rate being 4·1, compared with 4·5. While registration is so imperfect, it would be idle to speculate on the cause of this reduction.

The average death-rate from fevers in the selected areas was 10·9 per 1,000. The accompanying table shows the number of deaths in each district according to months :—

Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December	Total.
Goálpára	317	241	265	247	356	408	257	230	191	234	252	256	3,254
Kámrúp.....	306	289	269	303	302	377	350	288	265	289	229	242	3,609
Nowgong	132	62	63	57	74	117	148	135	159	120	98	61	1,226
Darrang.....	282	206	174	228	309	373	271	220	236	202	214	335	3,050
Sibságar	168	157	146	111	130	122	145	202	185	209	155	173	1,953
Lakhimpur	56	46	52	51	50	49	52	52	73	78	53	80	692
Cachar	27	25	12	24	36	30	25	21	43	13	30	29	315
Sylhet.....	127	100	92	108	141	137	140	119	149	127	138	138	1,515
Khási Hills	30	22	25	21	14	3	34	42	24	28	25	28	296
Total	1,445	1,148	1,098	1,150	1,412	1,616	1,422	1,309	1,325	1,300	1,194	1,341	15,910

The number of deaths in each of the twelve months was pretty equal. The high death-rate in January was probably due to the number of fatal cases of inflammatory chest affections, which were then registered under this head.

The following particulars with regard to the prevalence of fevers in each district are extracted from the Civil Surgeons' reports :—

Goálpára.

No particulars given.

Kámrúp.

Fevers are endemic all through the year. The chief type is intermittent; remittent is not common.

The area of this district is 3,631 square miles; of this number, only 797 square miles are under cultivation. 465 square

miles are covered by lakes and marshes; the rest is waste land. The soil is very damp, the climate humid and enervating, the air during the summer months being laden with moisture nearly to saturation. Thus, the elements necessary for the production of malarious fevers are present in abundance.

Darrang.

Intermittent fever is the most common disease in this district. It furnishes, with its sequelæ, about 36 per cent. of all cases of sickness. The conditions of soil and climate are much the same as in Kámrúp.

Nowgong.

Malarious fevers, dysentery, and diarrhœa are the forms of sickness chiefly met with. The river overflowed its banks to an unprecedented extent in July. Owing to this, the heavy rainfall, and the great alternations between the night and day temperature, the amount of fever and dysentery in June and July was unusually great.

Sibságar.

The deaths registered from fevers numbered 1,953, compared with 2,163 in 1873. Malarious fever is very prevalent in the district throughout the year. It appears in various forms,—of a bilious, intermittent, and remittent type,—and furnishes the largest number of deaths every year. Fevers contracted in the neighbourhood of the hills are invariably of severe remittent type. The lower classes of the people, the chief sufferers, are ill-fed, badly-clothed, ill-housed, and dwell in places abounding in malaria.

Lakhimpur.

The deaths registered from fevers in this district were fewer than in 1873—viz., 692, compared with 858.

Sylhet and Cachar.

In Sylhet and Cachar, fevers appear to have been less prevalent than in previous years. The deaths for three years were—

	1872.	1873.	1874.
Sylhet	1,772	1,989	1,515
Cachar	244	410	315

Khási Hills.

The deaths from fevers in the registering area were 296, yielding a mortality of 19·1 per 1,000, which is the highest in the Province. The Civil Surgeon observes—

"There are few local sources of malaria in the hills. A number of the deaths from fevers were probably due to typhoid, caused by the use of impure water and the filthy state in which the people live. There is no attempt at conservancy in the Khási villages. In Jowai, a good specimen of the class, the lanes and pathways are strewn with excrements of cattle and human beings, and refuse from the houses. Drinking-water is got from wells in the heart of the village, fed by the drainage of the surface-soil of the hills upon which the village is built."

Gáro Hills.

Intermittent and remittent fevers are very common. The records of the police and other hospitals at Tura show that malarial fevers are greatly in excess of all other diseases. In the police force, these fevers account for nearly half, and amongst the Nepalese coolies for nearly two-thirds, of the entire admissions into hospital. The Gáros, being acclimatized, enjoy a comparative immunity from attacks of ague.

Nága Hills.

Fevers, bowel-complaints, and other diseases, are said to be the diseases chiefly met with amongst the inhabitants of these hills.

IV.—Bowel-Complaints.

5,276 deaths, accounting for 12·3 per cent. of the total mortality, are registered under this head. There is little to remark on the subject.

Dysentery, prevailing chiefly amongst the poorer classes, and caused by exposure to cold, bad food, impure drinking-water, &c., probably caused more than nine-tenths of these deaths.

In the subjoined table, the number of deaths, and ratio per 1,000, in the general and selected areas in each district are

shown. The highest mortality was registered in the Darrang district:—

Districts.	General area.			Selected area.	
	Deaths.	Ratio per 1,000.		Deaths.	Ratio per 1,000.
Goálpára	864	2·1	Urban ...	65	10·7
			Rural ...	20	3·8
Kámrúp	1,252	2·2	Urban ...	62	5·3
			Rural ...	266	11·3
Nowgong	468	1·8	Urban ...	17	5·8
			Rural ...	54	9·9
Darrang	1,397	5·9	Urban ...	51	22·3
			Rural ...	43	6·6
Sibságar	780	2·6	Urban ...	7	1·3
			Rural ...	9	3·
Lakhimpur	309	2·5	Urban ...	48	10·9
			Rural ...	83	4·
Khási Hills	38	2·4	Rural ...	27	2·1
			Urban ...	27	1·6
Sylhet	94	0·5	Rural ...	51	2·1
			Urban ...	6	1·6
Cachar	74	·3	Rural ...	...	...
Total ...	5,276	1·3		836	5·4

V.—Injuries.

Injuries of all kinds account for 769 deaths, that is, 1·8 per cent. of the total mortality. Of this number, 401, or more than half, were caused by snake-bites and injuries inflicted by wild beasts, chiefly tigers. The remainder are—suicide, thirty-two; wounding, forty-six; accidents, 290.

VI.—All other Causes.

2,788 deaths have been registered under this heading. Still-births account for 665, or nearly one-fourth of this number. In the Goálpára district, three cases of still-births of hermaphrodites were registered.

SECTION V.—SANITARY PROGRESS.

The following remarks, taken from the Sanitary Reports for the year, show to what extent sanitary measures have been carried out, and the chief defects that still exist.

Goálpára.

The sanitary condition of the station has been attended to, as far as available funds—viz., Rs. 2,525 annually—admitted. The amount is inadequate, so the efforts to effect improvements have been restricted.

However, the roads have been kept in good repair, tanks cleared of weeds, surface-drains kept open and free from refuse, and rank vegetation removed.

Seven serais, or rest-houses for native travellers, have been erected at intervals along the road from Cooch Behar. A supply of dry straw for bedding is provided in each serai.

A hospital has been built at Dhubri, where immigrant coolies attacked by cholera are detained for treatment. A similar building has been erected on the banks of the Brahmaputra, at a point six miles below Goálpára.

An objectionable practice, common at the sudder station, is that of mooring timber rafts close to inhabited localities. The crews of the rafts live on them, and defile the streams, the water of which is used for drinking purposes. Where the water is sluggish, cholera and diarrhœa may be readily propagated in this way.

Kámrúp.

Sanitation is making progress in Gauháti, owing to the active exertions of the Municipal Committee.

The large tanks, from which much of the water-supply is derived, are kept scrupulously clean. Fouling of the tanks in any way is punishable by a municipal bye-law.

The streets are kept clean, surface-drains open and free from obstructions, and the inhabitants, both Europeans and

natives, are obliged to attend to the conservancy of the grounds about their houses. This is enforced by the municipality.

Each member of this body has a quarter of the town assigned to him for supervision. The large bheels which surround the station towards the south render it unhealthy. A scheme is under consideration to improve the condition of the large "Chola Bheel."

Darrang.

The sanitary condition of the district has undergone little change during the year. In the station of Tezpur, surface-drains of masonry are being gradually extended, and some progress has been made towards draining the low swampy ground between the hills. A great amount of labour had to be spent in checking the growth of rank vegetation. There is a great deal of waste land in the station, upon which a thick crop of unhealthy underwood springs up in the rainy season.

The ground near the houses of the poorer natives is said to be very filthy and ill-kept, especially during the rains. Conservancy there is none. The scarcity and high price of labour, and the fact that the majority of the people are poor, are the chief obstacles to sanitary improvement in Tezpur.

Nowgong.

The sanitary condition of the parts of the station occupied by the Europeans is good; but little or no attention is paid to conservancy by the natives. There is no municipality in Nowgong, and no important sanitary measures have been carried out during the year.

For the improvement of the civil station, the measures suggested are—"to lop off the lower branches of the trees to within sixteen feet from the ground; to thin out the trees where they grow too quickly; to enforce conservancy, and the removal of rank vegetation from the ground of native residents; to cut and slope the drains, so as to carry off surface-water into the rivers; and the establishment of public latrines."

Sibságar.

There is no municipality in Sibságar. Conservancy in the sudder and sub-divisional stations has been carried out

under the direction of the Deputy-Commissioner and his assistant.

In Sibságar, the large tank is carefully preserved for drinking purposes. No bathing or washing of clothes, as was formerly the custom, is allowed in it. The market-places have been kept clean and free from jungle, the roads have been much improved, and surface-drains have been kept clean and open.

With the exception of the sudder and sub-divisional towns, the sanitary condition of the district is very bad. It consists of an extensive low swampy plain on the left bank of the Brahmaputra. A great portion of it is subject to heavy annual inundations.

The country is covered with an immense mass of jungle and forests, and abounds in lakes, swamps, and low-lying ground.

Lakhimpur.

No information on the subject of sanitary progress is given in the annual sanitary report.

Sylhet.

The sanitary condition of the town of Sylhet is thus described by the Civil Surgeon:—

"The space occupied by the European houses is open ground extending along the banks of the river for about two miles. It is intersected by roads, and contains so many tanks that it would be scarcely an exaggeration to say that it consists more of water than solid ground.

"The uncleared portion of the town, where the majority of the people live, lies behind, that is, to the north of the cleared portion, and extends nearly the same length from east to west, with an average depth of two miles from the river. Over this extent are spread the numerous mohullas of the town, all more or less enveloped in dense vegetation, so much so that, were it not for the temples, &c., of former days that one meets, he would fancy that he was looking at a virgin forest into which the inhabitants had recently ventured. From the road, a thatched roof peeping through the bamboos is all that can be seen, but this may be one of fifty houses buried in jungle. The stagnation of air, want of sunlight, and constant dampness, that this state of things represents may be easily imagined.

"Worse than this, almost every house has a water-hole, the contents of which are, too often, foul water and weeds. Round most of the mohullas runs a chain of ditches, intended, no doubt, to drain the ground; but, from want of a proper incline, they are filled to overflowing in the wet season, and are filled with decaying vegetation and filth at other times.

"The nearest shelter represents the conservancy of the poorer class; the better class have privies, the accommodations in which are probably more dangerous than the primitive out-door arrangement."

Cachar.

The sanitary condition of the district is reported to be improving. Several good roads have been made. Drains are to be cut in different parts of the station of Silchar, many of the stagnant pools have been filled up, new tanks are being constructed; the surface has been kept clean, and the growth of rank vegetation repressed.

Many measures still require to be carried out, the chief of which are the construction of public latrines, the sinking of pucca wells, and the removal of objectionable houses, such as the distillery and slaughter-houses, from within the station.

Khási Hills.

The sanitary condition of Shillong, the head-quarters station, is good. The natural drainage is excellent.

Drinking-water is obtained chiefly from hill-streams. The conservancy of the banks of these streams is attended to. Measures have been suggested for improving the water-supply afforded by the station watercourse.

Public latrines are to be erected in suitable places—viz., in the bazar, near the cutcherry, &c.

The sanitary condition of the cantonment is reported to be very good. The staff of station sweepers and beldars keep the roads and drains clean, and the surface generally free from pollution. The charitable dispensary has been considerably enlarged during the year.

Gáro Hills.

Many useful sanitary measures have been carried out in Tura. The station has been considerably extended; fresh sites

have been cleared and occupied; new barracks have been built for the police force out of the station, and lower down on the spur of the hill. A new bazar has been erected still lower down, and sites have been marked out for the Nepalese labourers. The sheds of the Government elephants, bullocks, &c., have been removed to without the station. The effect of these measures has been to spread out the population over a much larger space than it formerly occupied. Roads have been laid out, surface-drains have been cut, and trees planted in the station.

The drinking-water is good. Latrines have been erected in convenient places. There are four station sweepers, who attend to the conservancy of the latrines, and of the station generally.

Nága Hills.

The growth of jungle near the station was kept down; the reservoir for rain-water repaired; a new range of quarters for the married men of the police force erected; the dispensary building repaired, &c. The sanitary condition of the station generally is said to be good.

SECTION VI.—METEOROLOGY.

The meteorological reports for this Province are compiled in the office of the Meteorological Reporter to the Government of Bengal.

The most remarkable feature in the climate of the year was the unusually heavy rainfall. The amount of rain that fell in each district was considerably above the average of previous years.

SECTION VII.—BIRTH STATISTICS.

The registration of births in this Province has been confined to the selected areas. The total number of births registered in 1874 was 3,447—viz., 1,787 males and 1,660 females. The deaths registered in these areas during the year amounted to 5,792, being 2,345 in excess of the births. While the birth-rate is only 22·3, the death-rate is 37·1, or 14·8 per 1,000 in excess. Colonel Keatinge was not prepared to find the

returns assume this shape. He assumes that there is some caste prejudice or superstition which interferes with the report of births, and will make special inquiries on the subject.

In the subjoined table, the births registered in each area are shown, and the birth-rate in each in comparison with the death-rate. The areas are arranged in order of efficiency of registration:—

No.			Births.		Death ratio per 1,000.	Excess per 1,000 of births over deaths.	Excess per 1,000 of deaths over births.
			Number.	Ratio per 1,000.			
1	Sibságar	Urban ...	227	43·6	18·4	25·2	.....
2	Darrang	Rural ...	276	42·6	58·	.....	16·2
3	Goálpára.....	„	202	39·2	68·4	.....	29·2
4	Khási Hills.....	„	431	34·4	28·	6·3	.....
5	Kámrúp	„	689	29·3	55·9	.....	26·6
6	Nowgong	„	157	28·8	41·9	.....	13·1
7	Cachar.....	„	110	26·5	25·3	3·6	.....
	Darrang	Urban ...	60	26·2	37·2	.....	19·8
	Goálpára	„ ...	126	20·7	40·4	.....	19·7
10	Sylhet.....	Rural ...	416	18·7	34·6	.....	15·9
11	Lakhimpur	Urban ...	75	17·1	70·8	.....	45·4
12	Sibságar.....	Rural ...	50	16·7	29·8	.....	12·4
13	Sylhet.....	Urban ...	270	16·	35·	.....	19·
14	Nowgong	„ ...	39	13·5	41·9	.....	28·4
15	Lakhimpur	Rural ...	217	10·5	25·8	.....	15·3
16	Kámrúp	Urban ...	80	6·9	18·5	.....	11·6
17	Cachar	„	22	5·8	8·3	.....	2·9
	Totals and averages	.....	3,447	22·2	37·3	.....	14·8

In all but three areas the death-rate preponderates. In the first four areas, the birth-rate is high, and rather above the

average of other countries. In the next five, registration has been fair; but in the remaining eight—viz., Sylhet urban and rural, Lakhimpur urban and rural, Sibságar rural, and Nowgong, Kámrúp, and Cachar urban areas, it has been decidedly bad.

However, as birth-registration has been in force for only two years in most areas, much accuracy can hardly be expected. On the whole, the registration has been satisfactory, and the average obtained—viz., 22·2 per 1,000—fair.

As in the case of deaths, the districts of Darrang and the Khási Hills stand foremost in efficiency of birth-registration.

By order of the Chief Commissioner of Assam.

H. J. PEET, *Captain*,

Offg. Secretary to the Chief Commissioner of Assam.

APPENDICES.

TABLE I.

Deaths Registered in the Province of Assam during 1874.

1	2	3	4			5	6	7			8			9		
Number.	Tracts.	Districts.	Population.			Area in square miles.	Average population per square mile.	Number of deaths registered.			Ratio per 1,000 of population.			Mean ratio of deaths per 1,000 during previous three years.		
			Male.	Female.	Total.			Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
1	Brahmaputra Valley.	Goálpára	229,374	215,387	*444,761	4,433	100	2,646	2,166	4,812	11·6	10·	10·8	...	...	...
2		Kámrúp	292,688	268,993	561,681	3,631	155	6,671	5,249	11,920	22·7	19·5	21·2	...	...	...
3		Nowgong	133,107	123,283	256,390	3,648	70	2,919	2,377	5,296	21·9	19·3	20·6	...	...	...
4		Darrang	122,837	113,172	236,009	3,413	69	4,260	3,801	8,061	34·6	33·5	34·1	...	...	...
5		Sibságar	154,940	141,649	296,589	2,413	122	1,869	1,595	3,464	12·	11·2	11·6	...	...	...
6		Lakhimpur ...	64,692	56,575	121,267	3,145	39	1,109	981	2,090	17·2	17·4	17·2	...	...	...
7	Surmá Valley	Sylhet	880,330	839,209	1,719,539	5,383	319	3,451	2,322	5,773	3·9	2·7	3·3	...	...	...
8		Cachar	110,373	94,654	205,027	1,285	159	443	304	747	3·9	3·1	3·4	...	...	...
9	Hill Districts.	Khási Hills ...	68,493	73,245	141,838	6,157	...	237	191	428	3·4	2·8	3· †	...	...	...
		Total.....	2,056,934	1,926,167	3,983,101	33,508	118	23,605	18,986	42,591	11·5	9·9	10·8	...	...	...

* Including Eastern Dooars.
† The ratio in the *registering area* is 27·6.

TABLE II.

Deaths Registered in the Selected Areas in the Province of Assam during 1874.

1	2	3		4			5	6	7			8			9		
Number.	Tracts.	Districts.		Population.			Area in square miles.	Average population per square mile.	Number of deaths registered.			Ratio of deaths per thousand of population.			Mean ratio of deaths per thousand during previous three years.		
				Male.	Female.	Total.			Male.	Female.	Total.	Male.	Female	Total.	Male.	Female	Total.
1	Brahmaputra Valley.	Goálpára	Urban	3,708	2,353	6,061	1·16	5,225	145	100	245	39·1	42·4	40·4	...	...	...
			Rural	2,680	2,465	5,145	6·	857	187	165	352	69·7	66·9	68·4	...	...	...
2		Kámrúp	Urban	7,119	4,373	11,492	2·	5,746	151	62	213	21·2	14 1	18·5	...	...	...
			Rural	12,441	11,028	23,469	30·	782	684	628	1,312	54·9	56·9	55·9	...	...	...
3		Nowgong	Urban	1,613	1,270	2,883	1·22	2,363	73	48	121	45 2	37·7	41·9	...	...	...
			Rural	2,807	2,627	5,434	7·39	727	125	110	235	44·5	41·8	43 2	...	...	...
4		Darrang	Urban	1,400	882	2,282	1·	2,282	62	43	105	44·2	48·7	46·	...	...	...
			Rural	3,322	3,153	6,475	53·	122	187	189	376	56·3	59·9	58·	...	...	..
5		Sibságar	Urban	2,838	2,362	5 200	6·96	747	53	43	96	15·1	18·2	18·4	...	...	...
			Rural	1,489	1.500	2.989	490·17	6	47	42	89	31·5	26·6	29 7	...	...	...
6		Lakhimpur	Urban	2.220	1,650	3,870	5·2	841	152	122	274	68·4	73·9	70·8	...	...	...
			Rural	10,463	10,103	20,566	548 7	37	283	249	532	27·04	24 6	25·8	...	...	...
7	Surmá Valley.	Sylhet	Urban	9,416	7,430	16.846	...	...	316	274	590	33·5	36·8	35·	...	...	...
			Rural	10,690	11,474	22,164	..	...	390	377	767	36·4	31·1	34·6	...	...	...
8		Cachar	Urban	2,923	806	3,729	3·29	1,133	21	10	31	7·1	12·4	8·3	...	...	...
			Rural	2.131	2,010	4,141	5 62	737	57	48	105	26 7	24·3	22·9	...	...	...
9	Hill Districts.	Khási Hills	Rural	5,674	6,830	12,504	...	...	189	162	351	33·3	23·7	28·	...	...	...
			Total	82,934	72,316	155,250	...	...	3,122	2,670	5,794	37·6	36·9	37·3	...	...	...

TABLE III.

Deaths Registered from different causes in the Province of Assam in 1874.

1	2	3	4			5			6			7			8		
Numbers	Tracts.	Districts.	Population.			Cholera			Small pox			Fevers.			Bowel-complaints.		
			M.	F	T	M.	F.	T	M.	F	T.	M.	F	T	M	F.	T
1	Brahmaputra Valley	Goálpára .	229,374	215,387	444,761*	125	147	272	45	50	95	1,868	1,386	3,254	416	448	864
2		Kámrúp .	292,688	268,993	561,681	3,104	2,801	5,905	311	218	529	2,150	1,459	3,609	704	548	1,252
3		Nowgong ..	133,107	123,283	256,390	1,677	1,429	3,106	102	94	196	655	571	1,226	281	187	468
4		Darrang	122,837	113,172	236,009	1,536	1,461	2,997	96	89	185	1,619	1,431	3,050	782	615	1,397
5		Sibságar .	154,940	141,649	296,589	196	141	337	52	36	88	1,032	921	1,953	424	356	780
6		Lakhimpur	64,692	56,575	121,267	432	423	855	55	62	117	385	307	692	176	133	309
7	Surma Valley	Sylhet .	880,330	839,209	1,719,539	1,563	1,200	2,763	91	56	147	998	517	1,515	59	35	94
8		Cachar ..	110,373	94,654	205,027	133	86	219	8	5	13	187	128	315	45	29	74
9	Hill Districts	Khási Hills ..	68,493	73,245	141,838	14	10	24			.	171	125	296	19	19	38
		Total .	2,056,934	1,926,167	3,983,101	8,780	7,698	16,478	760	610	1,370	9 065	6,845	15,910	2,906	2,370	5,276

* Including Eastern Dooars

TABLE III.—(*Continued.*)

Deaths Registered from different causes in the Province of Assam in 1874.

Number.	Tracts	Districts.	9												10			11			12							
			Injuries.												All other causes.			Total from all causes.			Ratio of deaths per 1,000 of population.							
			Suicides.			Wounding.			Accidents.			Snake-bite or wild beast.									Cholera.	Small-pox.	Fevers.	Bowel complaints	Injuries.	All causes		
			M	F	T	M.	F.	T.	M.	F	T.	M.	F.	T.	M	F.	T	M	F.	T.						M.	F	
1	Brahmaputra Valley	Goálpára .	2	1	3	3	..	3	16	13	29	64	24	88	107 3	94	204	26463	2,163	4,812	·6	2	7·3	1·9	·2	11 1	10·	10·8
2		Kámrup .	3		3	3	..	3	11	2	13	79	16	95	306	205	511	6,671	5,249	11,920	10·5	9	6·4	2·2	·2	22·7	19·5	21·2
3		Nowgong ..	1	1	2	4	.	4	25	14	39	79	23	102	95	58	153	2 919	2 377	5,296	12·1	7	4 7	1·8	5	21·9	19·3	20·6
4		Darrang .	10	4	14	3	..	3	17	8	25	23	6	29	174	187	361	4,260	3,801	8,061	12·6	7	12 5	5·9	·2	34·6	33·5	34 1
5		Sibságar*	1	1	2	9	3	12	33	21	54	19	2	21	103	114	217	1,869	1,595	3,464	1 1·	·2	6·5	2·6	·3	12·	11·2	11 6
6		Lakhimpur . ..	2	1	3	3	3	6	13	10	23	4		4	39	42	81	1,109	981	2,090	7	9	5 7	2·5	·2	17·2	17·4	17·2
7	Surmá Valley	Sylhet . ..	2	3	5	7	7	14	51	39	90	44	11	55	636	454	1 090	3,451	2,322	5,773	1·6	·08	·8	·05	·08	3·9	2·7	3·3
8		Cachar	..		..	1	.	1	9	7	16	2	3	5	58	46	104	443	304	747	1	·06	1 4	·3	1	3 9	3 1	*3·4
9	Hill Districts	Khási Hills . ..	.	..	.	..	.	.	1	.	1	1	1	2	31	36	67	237	191	428	1·5		19 1	2·4	1	3 4	2·8	3 0
		Total	21	11	32	33	13	46	176	114	290	315	86	401	1,549 3	1 236	2788	23 6053	18,983	42,591	4 3	·3	4 1	1 3	·2	11 5	9·9	10·8

* The ratio in the registering area is 27 6.

TABLE IV.

Deaths Registered from different causes in the Selected Areas of the Province of Assam.

1	2	3		4			5			6			7			8		
No.	Tracts.	Districts.		Population.			Cholera.			Small-pox.			Fevers.			Bowel-complaints.		
				Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
1	Brahmaputra Valley.	Goalpara	Urban	3,706	2,353	6,061	8	3	11	..	..	..	76	55	131	40	23	63
			Rural	2,680	2,465	5,145	48	54	102	4	6	10	113	89	202	13	7	20
2		Kámrup	Urban	7,119	4,373	11,492	35	23	58	4	2	6	39	18	57	51	11	62
			Rural	12,441	11,028	23,469	356	376	732	36	27	63	85	89	174	150	116	266
3		Nowgong	Urban	1,613	1,270	2,883	29	19	48	12	12	24	6	6	12	9	8	17
			Rural	2,807	2,627	5,434	49	41	90	5	9	14	29	31	60	32	22	54
4		Darrang	Urban	1,400	882	2,282	8	2	10	..	..	..	8	15	23	34	17	51
			Rural	3,322	3,153	6,475	62	55	123	6	10	16	51	73	124	26	17	43
5		Sibsagar	Urban	2,838	2 362	5,200	..	..	..	6	2	8	21	17	38	3	4	7
			Rural	1,489	1,500	2,989	..	..	..	2	..	2	32	31	63	4	5	9
6		Lakhimpur	Urban	2,220	1.650	3,870	50	36	86	3	3	6	67	51	118	24	24	48
			Rural	10,463	10,103	20,566	156	147	303	14	13	27	47	41	88	50	33	83
7	Surma Valley	Sylhet	Urban	9.416	7,430	16,846	66	53	119	18	12	30	73	71	144	c 10	17	27
			Rural	10,690	11,474	22,164	211	211	422	15	22	37	68	54	122	25	26	51
8		Cachar	Urban	2,923	806	3 729	3	2	5	1	..	1	12	6	18	4	2	6
			Rural	2,131	2,010	4,141	4	9	13	..	1	1	24	19	43	..	..	..
9	Hill Districts	Khási Hills	Urban	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
			Rural	5,674	6,830	12,504	4	4	8	..	..	..	163	123	286	10	17	27
		Total	.....	82,934	72,816	155,250	1,095	1.035	2,130	126	119	245	914	789	1,703	485	351	836

TABLE IV.—(*Continued.*)

Deaths Registered from different causes in the Selected Areas of the Province of Assam.

No.	Tracts.	Districts.		9												10			11			12								
				Injuries.												All other causes.			Total deaths from all causes.			Ratio of deaths per 1,000 of population.								
				Suicide.			Wounds.			Accidents.			Snake-bite and wild beasts.														From all causes.		
				Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Cholera.	Small-pox.	Fevers.	Bowel-complt.	Injuries.	Male.	Female.	Total.
1	Brahmaputra Valley.	Goálpara ..	Urban	1	..	1	..	..	..	1	..	1	3	2	5	16	15	31	145	100	245	1·8	..	21·6	10·7	1·1	38·8	42·4	40·4
			Rural	..	..	..	..	..	..	1	1	2	2	..	2	8	7	15	187	165	352	19·8	1·9	39·2	3·8	·5	69·7	66·9	68·4
2		Kamrúp ..	Urban	..	..	..	..	..	..	1	..	1	..	..	..	21	8	29	151	62	213	5·04	·5	4·9	5·3	·09	21·2	14·1	18·5
			Rural	..	..	..	..	..	..	3	..	3	5	..	5	49	20	69	684	628	1,312	31·1	2·6	7·4	11·3	·3	54·9	56·9	55·9
3		Nowgong ..	Urban	..	..	..	..	..	..	..	..	..	..	..	..	17	3	20	73	48	121	16·6	8·3	4·1	5·8	..	45·2	37·7	41·9
			Rural	..	1	1	..	..	..	..	..	..	1	1	2	9	5	14	125	110	235	16·3	2·5	11·04	9·9	·5	44·5	41·8	43·2
4		Darrang ..	Urban	..	..	..	..	..	..	1	..	1	..	..	..	11	9	20	62	43	105	4·3	..	10·08	22·3	·4	44·2	48·8	46·0
			Rural	..	..	..	..	..	..	2	..	2	3	..	3	51	34	65	187	189	376	19	2·4	19·1	6·6	·7	56·3	59·9	58·0
5		Sibságar ..	Urban	..	..	..	..	..	..	..	1	1	..	..	..	23	19	42	53	43	96	..	·07	7·3	1·3	·1	19·6	18·2	18·4
			Rural	..	..	..	..	1	1	1	1	2	2	..	2	6	2	8	47	42	89	..	·07	21·07	3·01	1·6	31·5	26·6	29·7
6		Lakhimpur	Urban	..	..	..	1	..	1	1	1	2	..	..	..	6	7	13	152	122	274	9·8	1·3	26·9	10·9	·6	68·1	73·9	70·8
			Rural	..	..	..	..	2	2	1	..	1	..	..	..	15	13	28	283	249	532	14·7	1·3	4·2	4·03	·1	27·	23·7	25·0
7	Surmá Valley	Sylhet	Urban	..	..	..	3	1	4	3	..	3	1	..	1	142	130	272	316	274	590	7·	1·7	8·5	1·6	·5	33·5	36·8	35·0
			Rural	..	..	..	..	..	..	6	8	14	9	..	9	70	65	135	390	377	767	19·	1·6	5·5	2·1	1·	36·4	32·8	34·6
8		Cachar	Urban	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	21	10	31	1·3	·2	4·8	1·6	..	7·1	11·1	8·3
			Rural	..	..	..	..	..	..	..	..	..	..	..	..	29	19	48	57	48	105	2·9	·2	9·6	..	..	26·7	23·8	22·9
9	Hill Districts ..	Khasi Hills	Urban	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
			Rural	..	..	..	..	..	..	1	..	1	1	1	2	10	17	27	189	162	351	·6	..	22·	2·1	2	33·3	3·23	28·0
		Total	....	1	1	2	4	4	8	21	12	33	27	4	31	464	373	837	3,122	2,670	5,794	13·7	1·5	10·9	5·4	·4	37·6	36·9	37·3

TABLE V.

Deaths Registered according to Classes in the Province of Assam during 1874.

1	2	3	4					5					6				
Number	Tracts.	Districts.	Population.					Number of deaths registered.					Ratio of deaths per 1,000 of population.				
			Christians.	Mahomedans.	Hindus.	Other classes.	Total.	Christians.	Mahomedans.	Hindus.	Other classes.	Total.	Christians.	Mahomedans.	Hindus.	Other classes.	Total.
1	Brahmaputra Valley.	Goálpára ...	202	104,940	326,843	12,776	*444,761	...	1,270	2,352	1,190	4,812	...	12·1	7·1	93·1	10·8
2		Kámrúp ...	233	45,823	515,024	601	561,681	10	868	10,923	119	11,920	42·9	18·9	21·2	198·	21·2
3		Nowgong ...	179	10,066	245,615	530	256,390	4	248	4,987	57	5,296	22·3	24·6	20·3	107·5	20·6
4		Darrang ...	274	13,859	221,371	505	236,009	7	341	7,243	470	8,061	25·5	24·6	32·7	930·6	34·1
5		Sibságar ...	283	12,619	282,969	718	296.589	5	152	3,208	99	3,464	27·6	12·0	11·3	137·8	11·6
6		Lakhimpur	312	6,127	112,441	2,387	121,267	4	154	1,856	76	2,090	12·8	25·1	16·5	31·4	17·2
7	Surmá Valley.	Sylhet	159	851,399	861,766	6,215	1,719.539	1	3,101	2,602	69	5,773	6·2	3·6	3·	11·1	3·3
8		Cachar	342	73,029	130,418	1,238	205,027	...	344	386	17	747	...	4·8	2·9	13·7	3·4
9	Hill Districts ...	Khási Hills	250	7·967	8,334	125,287	141,838	10	5	7	406	428	40·	·6	·8	3·2	†3·
		Total...	2,234	1,125,829	2,704,781	150,257	3,983,101	41	6,483	33,564	2,503	42,591	18·3	5·7	12·4	16·6	10·8

* Including Eastern Dooars.
† The ratio in the *registering area* is 27·6.

TABLE VI.

Deaths Registered according to Classes in the Selected Areas in the Province of Assam in 1874.

1	2	3		4					5					6				
Number.	Tracts.	Districts.		Population according to Census of 1872.					Number of deaths registered.					Ratio of deaths per 1,000 of population.				
				Christians.	Mahomedans.	Hindus.	Other classes.	Total.	Christians.	Mahomedans.	Hindus.	Other classes.	Total.	Christians.	Mahomedans.	Hindus.	Other classes.	Total.
1	Brahmaputra Valley	Goálpára	Urban ..	22	3,000	2,500	539	6 061	..	99	123	23	245	....	33·	49·2	42·6	40·4
			Rural .	....	844	4,142	169	5,145	.	45	293	14	352	....	5·3	70·9	82·8	68 4
2		Kámrup	Urban ..	152	2,544	8,794	2	11 492	8	75	129	1	213	52·4	29·4	14·6	500·	18 5
			Rural ..	....	2,307	21.162	....	23,469		122	1,190	..	1,312	. .	52 9	56·2	.	55·9
3		Nowgong	Urban .	53	833	1,816	181	2,883	1	34	54	32	121	18·8	40·8	29·6	29·6	41·9
			Rural .	45	300	5,089	....	5 434	.	17	216	2	235	..	56·6	42·4		43·2
4		Darrang	Urban .	44	250	1,700	258	2,252	..	16	89	..	105	. .	57·1	52·3	.	46
			Rural ..	9	110	5,538	816	6,475	.	13	312	51	376	.	118·1	56 3	62·5	58·
5		Sibságar	Urban ..	92	1,330	3,721	7	5,200	2	16	78		96	21 7	11·6	20 9	.	18 4
			Rural ..	...	65	2,924	....	2,989		4	85	.	89	.	30 7	29		29·7
6		Lakhimpur	Urban ..	23	1.296	2,342	209	3,870	3	122	146	3	274	130·4	94 1	62·3	14·3	70·8
			Rural ..	4	145	19,992	425	20,566	.	3	516	13	532	2·6	25·	30·5	32 9	25·8
7	Surmá Valley	Sylhet	Urban .	68	8,089	8,607	82	16 846	2	319	257	12	590	29·4	39·4	29 9	146·5	35·
			Rural ..	Not given.				22,164	.	484	283	..	767	.	..			34·6
8		Cachar	Urban	3	1,072	2,694	....	3,729	..	7	24	..	31	.	6 7	8·9		8·3
			Rural ..	....	2.636	1,005	500	4,141	..	63	37	5	105	.. .	23·8	36·8	10·	22·9
9	Hill Districts.	Khasi Hills	Urban ..	....	....	....	....	....	.	....	....		....	.. .		. .	.	
			Rural .	204	6	10	12,284	12,504	5	1	....	345	351	24·5	166 6		28·	28·
		Total	....	719	24,867	92 026	15,472	155,250	21	1,438	3,832	501	5,794	29·2	57·8	41 6	32·3	37·3

TABLE VII.

Births Registered in the Selected Areas in the Province of Assam during 1874.

1	2	3		4			5	6	7			8			9		
Number.	Tracts.	Districts.		Population.			Area in square miles.	Average population per square mile.	Number of births registered.			Ratio of births per 1,000 of population.			Mean ratio of births per 1,000 during the previous three years.		
				M.	F.	Total.			M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
1	Brahmaputra Valley	Goálpara	Urban	3,708	2,353	6,061	1·6	5,225	62	64	126	16·4	27·1	20·7	....	....	....
			Rural	2,680	2,465	5,145	6	857	109	93	202	40·6	37·7	39·2	....	....	....
2		Kámrúp	Urban	7,119	4,373	11,492	2	5,746	52	28	80	7·3	6·4	6·9	....	....	....
			Rural	12,441	11,028	23,469	30	782	365	324	689	29·3	29·3	29·3	....	....	....
3		Nowgong	Urban	1,613	1,270	2,883	1·22	2,363	16	23	39	9·9	18·1	13·5	....	....	....
			Rural	2,807	2,627	5,434	739	727	69	88	157	24·5	33·4	28·8	....	....	....
4		Darrang	Urban	1,400	882	2,282	1	2,282	34	26	60	24·2	29·4	26·2	....	....	....
			Rural	3,320	3,153	6,473	53	122	127	149	276	38·2	47·5	42·6	....	....	....
5		Sibságar	Urban	2,838	2,362	5,200	6·96	747	127	100	227	44·8	42·3	43·6	....	....	....
			Rural	1,489	1,500	2,989	490·17	6	25	25	50	16·7	16·6	16·7	....	....	....
6		Lakhimpur	Urban	2,220	1,650	3,870	52·2	841	42	33	75	18·9	20·	19·3	....	....	....
			Rural	10,463	10,103	20,566	548·7	37	105	112	217	10·0	11·	10·5	....	....	....
7	Surmá Valley	Sylhet	Urban	9,416	7,430	16,846	.....	.....	150	120	270	15·9	16·1	16	....	....	....
			Rural	10,690	11,474	22,164	.....	.....	282	184	416	21·7	16·	18·7	....	....	....
8		Cachar	Urban	2,923	806	3,729	3·29	1,133	8	14	22	2·7	17·3	5·8	....	....	....
			Rural	2,131	2,010	4,141	5·62	737	60	50	110	28·1	24·8	26·5	....	....	....
9	Hill Districts	Khási Hills	Urban	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	....	....
			Rural	6,674	6,830	12,504	.....	.....	204	227	431	35·9	33·2	34·4	....	....	....
		Total.....	.....	82,934	72,316	155,250	.....	.....	1,787	1,660	3,447	21·5	22·9	22·2	....	....	....